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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,372	01/27/2004	Richard Westhoff	ASC-066	1594
51414	7590	07/23/2007		
GOODWIN PROCTER LLP PATENT ADMINISTRATOR EXCHANGE PLACE BOSTON, MA 02109-2881			EXAMINER MALSAWMA, LALRINFAMKIM HMAR	
			ART UNIT	PAPER NUMBER
			2823	
			MAIL DATE	DELIVERY MODE
			07/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/765,372	Applicant(s) WESTHOFF ET AL.	
	Examiner Lex Malsawma	Art Unit 2823	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 09 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: 35, 45-52, 80 and 81.  
Claim(s) objected to: NONE.  
Claim(s) rejected: 1-34, 36-44 and 76-79.  
Claim(s) withdrawn from consideration: NONE.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see continuation sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

The amendment filed 09 July 2007 will be entered because the listing of claims is the same as that filed on 19 December 2006, i.e., the listing of claims filed 09 July 2007 is a clean copy of the listing of claims filed on 19 December 2006.

Applicant's remarks/arguments have been carefully reviewed and considered, however, they are not persuasive because of the following reasons. Initially, it is noted, the word "throughout" is never used in the specification, accordingly, the limitation for "...diffusing...throughout the semiconductor layer" is clearly not disclosed by the specification. The specification discloses (on page 13, lines 7-10), "the annealing temperature may be sufficient to diffuse one or more of the elements included in the semiconductor layer 16 through a diffusion length at least equal to a quarter of the columnar period P2 (in an economically acceptable time)"; therefore, it would follow that a homogenous (i.e., relatively uniform) composition could be achieved if one of the elements diffuses through a diffusion length equal to a quarter of the columnar period P2, i.e., there would be NO requirement for one of the elements to diffuse throughout the semiconductor layer. Accordingly, the following remark is not persuasive (see Applicant's remarks on page 12, lines 13-15 in the response filed 9 July 2007), "If at least one of the two elements did not diffuse throughout the semiconductor layer, a homogeneous composition of the semiconductor layer could not be achieved".

In sum, with respect to the rejections under 35 U.S.C. 112, first paragraph, Applicant's remarks and the text portions of the specifications referenced by Applicant cannot overcome these rejections primarily because there is nothing in the specification requiring (or suggesting) that a diffusion "throughout" the semiconductor layer is necessary to achieve a homogeneous (i.e., a relatively uniform) composition.

In regard to Applicant's remarks with respect to the rejections under 35 U.S.C. 103, these remarks are essentially moot because they are generally directed to limitations provided by the new matter added to claims 1, 2, 16, 26 and 31, i.e., removing the new matter from the claims would essentially remove the basis of Applicant's remarks.



LEX MALSAWMA  
PRIMARY PATENT EXAMINER